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ESSAYS ON HOUSING AND THE MACROECONOMY

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Matricola: 3709968
Anno Accademico 2012/13

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Abstract

The recent global financial crisis and ensuing recession led many to look at the housing market as a possible source of macroeconomic fluctuations, highlighted the crucial role played by emerging market economies as a source of world growth, and revived the much discussed issue of the interaction between monetary policy and asset prices volatility. Motivated by these issues, my Ph.D. thesis focuses on housing markets in both advanced and emerging economies and their interaction with the macroeconomy.

This dissertation consists of three self-contained essays. The first essay describes a novel dataset on house prices for 19 emerging economies with quarterly data updated to 2009:4, to be compared with an existing database for 21 advanced economies. In the chapter, I investigate the properties of house prices and their interaction with the real economy at business cycle frequencies. A comparison between advanced and emerging economies shows that housing cycles share a common behavior across these groups: house prices in emerging economies are similarly more volatile than real variables, highly procyclical, and prone to boom-and-bust cycles. However, compared to advanced economies, house prices in emerging economies display less persistence and more sensibility to interest rates and speculative capital inflows.

The second essay investigates the international spillovers of housing demand shocks across housing markets and their impact on real economic activity. Many empirical studies have shown that business cycles often display a high degree of synchronization with financial cycles, both within and across countries. Moreover, recessions associated with financial disruption episodes, notably house price busts, tend to be longer and deeper than other recessions. Motivated by these findings, I estimate a Global Vector AutoRegressive (GVAR) model augmented with a housing sector using quarterly data from 1979:1 to 2009:4 for all major

advanced and emerging economies of the world. The impulse responses to an identified U.S. housing demand shock confirm the existence of strong international spillovers to advanced economies. In contrast, the response of some major emerging economies is not significantly different from zero. The impulse responses also show that synchronized housing shocks in advanced economies reinforce each other and have a deep and long-lasting impact on economic activity.

Finally, the global financial crisis has also ignited a debate on the role of policies for the stability of the financial system as a whole (i.e., macro-prudential policies). The third essay studies the uncharted interaction between monetary and macro-prudential policies in a simple model of consumption-based asset pricing with collateralized borrowing. The presence of a real and a financial friction gives rise to both a traditional macroeconomic stabilization role for policy and a more novel financial stability objective. There are two main results. First, interest rate rigidities have an asymmetric impact on financial stability: they exacerbate the effects of financial frictions in response to contractionary shocks to the economy, while act as an automatic stabilizer in response to expansionary shocks. Second, when the policy interest rate is the only available instrument, a policy authority subject to the same constraints as those of private agents cannot always achieve a (constrained) efficient allocation: in response to negative shocks, the policy maker faces a trade-off between macroeconomic and financial stability. This has important implications for the role played by U.S. monetary policy in the run up to the global financial crisis. Indeed, our model suggests that the weak link in the U.S. policy framework was not an excessively lax monetary policy stance after 2002, but rather the absence of an effective second policy instrument aimed at preserving financial stability.

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